



BRADMOOR ISLAND TIDAL RESTORATION PROJECT

Suisun Marsh, CA

TIDAL WETLAND

The California Department of Water Resources (DWR) will restore tidal inundation to approximately 500 acres of managed wetlands (currently operated as duck clubs), and enhance and protect another 115 acres of existing tidal habitat on Bradmoor Island in Suisun Marsh. Bradmoor Island is located within Solano County in the Nurse-Denverton Slough Complex of Suisun Marsh, an area known for high native fish diversity including Delta smelt, longfin smelt, and Chinook salmon. The goal of this effort is to restore tidal wetlands in an area where tidal restoration has a high potential to directly benefit listed fish species. The proposed project site would restore tidal action to currently managed wetlands, retain and protect the existing tidal berms, and provide an upland edge to create terrestrial habitat and help provide sea level rise accommodation to the site.

DWR acquired one parcel on the island in 2012, a second parcel in 2016, and the third parcel in 2017. The project includes managing and maintaining these three parcels while undertaking vegetation control and site preparation, and breaching the levees along Nurse Slough, Denverton Slough, and Little Honker Bay. The project will connect the three parcels to help restore natural geomorphology between the adjacent sloughs and Little Honker Bay. Bradmoor Island is across Little Honker Bay from the previously constructed Blacklock restoration site, which can provide good interconnected habitat between both sites. Listed fish species would likely benefit from restored connection to the Nurse Slough complex through high food web productivity and increased access to onsite habitat. DWR will also place a conservation easement on the entire 745 acres of the property, and monitor the site to evaluate restoration performance and meet permit conditions.

The purpose of this restoration effort is to partially fulfill obligations under the 2008 Biological Opinion for long term operations of the Central Valley Project and State Water Project (SWP), as well as meet restoration goals of the Suisun Marsh Plan. The project design will be reviewed by all stakeholders and permitting agencies

and will be of sufficient detail to complete specifications and impact analysis. It will also be reviewed by the Suisun Marsh Adaptive Management Advisory Team and the Fisheries Agencies Strategy Team for Suisun Marsh Plan implementation, and for crediting under the Fish Restoration Program Agreement. Restoration credit will be determined by the Fisheries Agencies Strategy Team, comprised of the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the U.S. Bureau of Reclamation to meet their Biological Opinions and Incidental Take Permit requirements.

Preliminary planning includes conducting surveys, site characterization, and baseline monitoring. Interim property management activities will be completed by DWR to prepare the property for restoration. This includes maintenance and improvement of existing infrastructure, such as levees and water control structures, moist soil and vegetation management to maintain access, promote growth of desirable vegetation, and to prevent growth of invasive species prior to restoration. Construction activities include installing ditch blocks, removing debris and infrastructure, installing any necessary monitoring equipment and facilities, and constructing breaches in existing levees. DWR will complete all monitoring associated with permit conditions.

RESTORATION GOALS AND TARGETS

- Total for the three parcels:
- ▶ Tidal restoration: 500 acres
- ▶ Enhancement and protection of existing tidal habitat: 115 acres
- ▶ Upland habitat: 125 acres



■ Specific project objectives:

- ▶ Benefit listed fish species (including longfin smelt, Delta smelt, and listed salmonids) and special-status wildlife species by increasing food productivity and quality of habitats
- ▶ Develop a restoration site that is self-sustaining over time, take advantage of natural features on the site to promote habitat resiliency, and incorporate design features that anticipate potential effects from climate change
- ▶ Facilitate adaptive management and monitoring of the habitats on the Island
- ▶ Avoid promoting conditions, such as noxious weed infestations, that conflict with the above objectives

FUNDING

- ▶ The project will be funded by SWP for all phases of the effort

PERMITTING

- Clean Water Act
 - ▶ Section 404 Compliance (U. S. Army Corps of Engineers)
 - ▶ Section 401 Certification (Regional Water Quality Control Board)
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- Endangered Species Act:
 - Section 7 permit (USFWS and NMFS)
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- National Historic Preservation Act:
 - ▶ Section 106 Permit (State Historic Preservation Officer)
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- State Lands Lease Amendment (may be needed):
 - ▶ California State Lands Commission
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- California Environmental Quality Act (CEQA) Compliance:
 - ▶ Environmental Impact Report addendum or Mitigated Negative Declaration
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- ▶ Coastal Zone Management Act-Work Authorization Permit (Bay Conservation and Development Commission)

TIMELINE/MILESTONES

- ▶ Property acquisition completed: February 2017
- ▶ CEQA final: Mid-2018
- ▶ Submit permit applications: Mid-2018
- ▶ Permits obtained: Mid-2019
- ▶ Construction design completed: Late 2018
- ▶ Begin construction: Mid-2019
- ▶ Construction completed: Late 2020
- ▶ Monitoring completed: Late 2030

PROJECT PROPONENT

- ▶ Department of Water Resources
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